

BIOLOGY - CELL/PHYSIOLOGY EMPHASIS REQUIREMENTS (BA/BS)

Code	Title	Units
Major Requirements ¹		
BIOLOGY 141	INTRODUCTORY BIOLOGY I	5
BIOLOGY 142	INTRODUCTORY BIOLOGY II	5
BIOLOGY 190	BIOLOGY FORUM	1
BIOLOGY 251	INTRODUCTION TO GENETICS	4
BIOLOGY 253	INTRODUCTION TO CELL BIOLOGY	3
BIOLOGY 254	BIOTECHNOLOGY LABORATORY METHODS I	2
BIOLOGY 257	INTRODUCTION TO ECOLOGY	3
BIOLOGY 311	MICROBIOLOGY	3-4
or BIOLOGY 363	MOLECULAR BIOLOGY	
Select 0-6 units combined of the following:		0-6
BIOLOGY 493	INTERNSHIP IN BIOLOGY	
BIOLOGY 498	INDEPENDENT STUDY	
BIOLOGY 498R	INDEPENDENT STUDY - UNDERGRADUATE RESEARCH	
BIOLOGY 491	TRAVEL STUDY (department approval required)	
Select at least three of the following:		10-12
BIOLOGY 301	INTRODUCTION TO BEHAVIORAL NEUROSCIENCE	
BIOLOGY 311	MICROBIOLOGY	
BIOLOGY 340	COMPARATIVE VERTEBRATE ANATOMY	
BIOLOGY 341	DEVELOPMENTAL BIOLOGY	
BIOLOGY 345	ANIMAL PHYSIOLOGY	
BIOLOGY 361	HUMAN ANATOMY AND PHYSIOLOGY I	
BIOLOGY 362	HUMAN ANATOMY AND PHYSIOLOGY II	
BIOLOGY 363	MOLECULAR BIOLOGY	
BIOLOGY 364	BIOTECHNOLOGY LABORATORY METHODS II	
BIOLOGY 412	IMMUNOLOGY	
BIOLOGY 425	APPLICATIONS OF CELLULAR BIOLOGY	
BIOLOGY 448	BIOINFORMATICS	
BIOLOGY 458	ADVANCED BIOCHEMISTRY LABORATORY	

Select additional units of Biology electives numbered 300 or above, except BIOLOGY 303, BIOLOGY 493 and BIOLOGY 498 or BIOLOGY 498R to total 40 units in the major

Total Units **40**

Code	Title	Units
Unique and Writing Requirements		
BIOLOGY 303	BIOSTATISTICS	3-4
or PSYCH 215	BASIC STATISTICAL METHODS	
CHEM 102	GENERAL CHEMISTRY I	5
CHEM 104	GENERAL CHEMISTRY II	5
CHEM 251	ORGANIC CHEMISTRY - I	3

Select one of the following: 3

BIOLOGY 200 WRITING IN BIOLOGY
or PWP 371 WRITING IN THE SCIENCES

Select one of the following: 4-7

MATH 142 COLLEGE ALGEBRA
& MATH 151 and TRIGONOMETRY

MATH 152 PRECALCULUS

MATH 243 CALCULUS FOR BUSINESS AND SOCIAL SCIENCES

MATH 250 APPLIED CALCULUS SURVEY FOR BUSINESS AND SOCIAL SCIENCES

Select one of the following: 2-5

CHEM 252 ORGANIC CHEMISTRY - II

CHEM 261 ORGANIC CHEMISTRY LABORATORY

CHEM 352 QUANTITATIVE ANALYSIS

CHEM 454 BIOCHEMISTRY OF MACROMOLECULES

BIOLOGY 456 BIOCHEMISTRY OF METABOLISM AND SIGNALING

CHEM 456 BIOCHEMISTRY OF METABOLISM AND SIGNALING

One of the following highly recommended:

PHYSICS 140 PRINCIPLES OF PHYSICS I

or PHYSICS 141 PRINCIPLES OF PHYSICS II

PHYSICS 180 PHYSICS FOR SCIENTISTS AND ENGINEERS I

or PHYSICS 181 PHYSICS FOR SCIENTISTS AND ENGINEERS II

Total Units **25-32**

¹ An approved minor is required for this major.